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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,480	01/27/2004	Donald Reichard	7237.3001.001	9525

7590 01/18/2007  
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EXAMINER
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LOWE, MICHAEL S

ART UNIT	PAPER NUMBER
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3652

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/18/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/765,480	REICHARD, DONALD	
	Examiner	Art Unit	
	M. Scott Lowe	3652	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-13 is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Claim Objections***

Claim 1 is objected to because of the following informalities:

Line 3 is amended to add "fixed" but lacks to underlining and also the lining out of the deleted limitation.

Line 17 states "multi ration" instead of "multi-ratio".

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell (US 5,282,515) in view of Fraser (US 4,915,577) and van der Lely (US 4,448,274).

Re claim 1, Bell teaches a boat trailer tug comprising:  
a primary collar (various unlabeled items in figure 1 apply), a mounting beam 12 fixed (thru 14) to the primary collar and extending to the rear of the primary collar, a hitch tongue 50 connected to the primary collar and extending forward from the primary collar, a hitch assembly component 52 attached to a hitch tongue forward end, and a mast 14 connected to the primary collar;

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a vertical height adjustment frame 15 slidably attached to the mast 14 and an actuator 16 connected to the vertical height adjustment frame and mast and operable to move the vertical height adjustment frame generally vertically relative to the primary collar; a power unit frame (not numbered) connected to the vertical height adjustment frame, a motor 22 mounted on the power unit frame, at least one tire and wheel 20 journaled on the power unit frame for rotation about a generally horizontal axis, and driven by the motor 22; and

a steering assembly (top of 15) mounted on the frame and connected to the at least one tire and wheel 20 and operable to pivot the at least one tire and wheel about a generally vertical axis to change the direction of movement of said boat trailer tug.

Bell does not teach the actuator 16 being a linear actuator with a bell crank. However, Fraser teaches that linear actuators 20 with bell cranks (figures 2a,2b,4) are known to be used for vertical height adjustment. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bell by the general teaching of Fraser to use a linear type actuator and bell crank as an well known equivalent and to reduce the amount of work done by the operator and to allow retrieval of boats from deeper water.

Bell does not teach a multi-ratio transmission. However, van der Lely teaches (column 7, lines 37-40) use of multi-ratio transmissions to allow for a variety of speeds and handling conditions. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bell by the general teaching of van

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der Lely to have multi-ratio transmissions in order to allow for a variety of speeds and handling conditions.

Re claim 2, Bell teaches the mast 14 connected to the primary collar includes at least one generally vertical mast beam (sides of 14) and wherein the vertical height adjustment frame 15 is slidably connected to the at least one generally vertical mast beam.

Re claim 4, Bell teaches the power unit frame pivotally connected to the vertical height adjustment frame 15 for pivotal movement about a generally vertical axis.

Re claim 5, Bell teaches the steering assembly (top of 15) pivots the power unit frame about the generally vertical axis.

Re claims 3,6, Bell teaches a boat trailer tug comprising:

a primary collar (various unlabeled items in figure 1 apply), a mounting beam 12 fixed to the primary collar, extending to the rear of the primary collar and connectable to a boat trailer, a hitch tongue 50 fixed (thru 14) to the primary collar and extending forward from the primary collar, and a hitch assembly component 52 attached to a hitch tongue forward end;

a primary mast 14 including a primary front vertical member (a side of 14) with a front member lower end fixed to the primary collar, a primary rear vertical member (a side of 14) with a rear member lower end fixed to the primary collar, and a primary horizontal beam (a horizontal member of 14) fixed to a primary front vertical member upper end and a primary rear vertical member upper end;

a vertical height adjustment frame 15 slidably attached to the primary front vertical member and the primary rear vertical member of the primary mast 14;

an actuator 16 connected to the primary collar and to the vertical height adjustment frame to slide the vertical height adjustment frame relative to the primary mast;

a power unit frame (not numbered) pivotally connected to the vertical height adjustment frame for pivotal movement about a generally vertical axis, a motor 22 mounted on the power unit frame, at least one tire and wheel 20 journaled on the power unit frame for rotation about a generally horizontal axis and driven by the motor 22; and

a steering assembly (top of 15) connected to the power unit frame for pivoting the power unit frame about the generally vertical axis relative to the vertical height adjustment frame.

Bell does not teach the actuator 16 being a linear actuator. However, Fraser teaches that linear actuators 20 are known to be used for vertical height adjustment. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bell by the general teaching of Fraser to use a linear type actuator as an well known equivalent and to reduce the amount of work done by the operator.

Bell does not teach a multi-ratio transmission. However, van der Lely teaches (column 7, lines 37-40) use of multi-ratio transmissions to allow for a variety of speeds and handling conditions. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bell by the general teaching of van

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der Lely to have multi-ratio transmissions in order to allow for a variety of speeds and handling conditions.

Re claim 7, Bell as already modified by Fraser teaches the linear actuator connected to the vertical height adjustment frame through a bell crank that is pivotally attached to the primary mast.

Re claim 8, Bell teaches an operator's seat (structure above items 24 and 26) mounted on the primary collar.

Re claim 9, Bell teaches the vertical height adjustment frame 15 includes a ring member (not numbered, see figure 1) that is smaller than the primary collar and could pass through the primary collar.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjorklund (US 3,568,624) in view of Fraser (US 4,915,577) and van der Lely (US 4,448,274).

Re claim 1, Bjorklund teaches a boat trailer tug comprising:  
a primary collar (any one of 18,26,28 or 76 meet this limitation), a mounting beam (54,55,etc.) fixed to the primary collar and extending to the rear of the primary collar, a hitch tongue (tow bar, column 4, lines 10-11) connected to the primary collar and extending forward from the primary collar, a hitch assembly component (tow bar, column 4, lines 10-11) attached to a hitch tongue forward end, and a mast 18 (or 76,etc.) connected to the primary collar;

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a power unit frame connected to a vertical frame, a motor 16 mounted on the power unit frame, at least one tire and wheel 38,40 journaled on the power unit frame for rotation about a generally horizontal axis, and driven by the motor 16; and  
a steering assembly 48 mounted on the frame and connected to the at least one tire and wheel 38,40 and operable to pivot the at least one tire and wheel about a generally vertical axis to change the direction of movement of said boat trailer tug.

Bjorklund does not teach vertical height adjustment. Fraser teaches a vertical height adjustment frame attached to a mast 17 and an linear actuator 20 with a bell crank connected to the vertical height adjustment frame an operable to move the vertical height adjustment frame generally vertically relative to a primary collar (various, such as 22 or 36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bjorklund by the general teaching of Fraser to have a vertical height adjustment frame attached to the mast and an actuator connected to the vertical height adjustment frame an operable to move the vertical height adjustment frame generally vertically relative to the primary collar in order to help load or unload the trailer especially in deeper water.

Bjorklund does not teach a multi-ratio transmission. However, van der Lely teaches (column 7, lines 37-40) use of multi-ratio transmissions to allow for a variety of speeds and handling conditions. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bjorklund by the general teaching of van der Lely to have multi-ratio transmissions in order to allow for a variety of speeds and handling conditions.



Re claim 2, Bjorklund as already modified by Fraser teaches the mast connected to the primary collar includes at least one generally vertical mast beam 15 and wherein the vertical height adjustment frame is slidably connected (at least slidably rotatably) to the at least one generally vertical mast beam.

Re claim 3, Bjorklund as already modified by Fraser teaches the actuator 20 connected to the vertical height adjustment frame is a linear actuator 20 that is also connected to the primary collar.

Re claim 4, Bjorklund as already modified by Fraser teaches the power unit frame is pivotally connected to the vertical height adjustment frame for pivotal movement about a generally vertical axis.

Re claim 5, Bjorklund teaches the steering assembly 48 pivots the power unit frame about the generally vertical axis.

### ***Allowable Subject Matter***

Claims 11-13 are allowed.

Claim 10 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Applicant's arguments with respect to the rejections in view of Bell alone, Bjorklund in view of Bell, and the multi-ratio transmission have been considered but are moot in view of the new ground(s) of rejection.

Applicant's remaining arguments filed 11/2/06 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the wheel of applicant's power unit is raised upward and off the ground during towing, the wheel slidably attached for vertical movement) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argued that the toe bar of Bjorklund would be pivotally attached, however there is nowhere in Bjorklund that states this nor any reason to believe that while the rest of the frame is fixed the toe bar would not also be fixed.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill that Fraser would provide Bjorklund the ability to load boats from deeper water than Bjorklund alone could.

Applicant's arguments against Bell in view of Fraser fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Scott Lowe whose telephone number is (571) 272-6929. The examiner can normally be reached on 6:30am-4:30pm M-W; Th work offsite.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571)272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

msl



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